Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_

**Biotechnology Career Assignment**

Adapted from an assignment created by Ms. Bedford

**Purpose:** Create a career profile for a biotechnology profession.

For this project, you will be selecting a biotechnology career, researching it, and creating a job listing for this career. Biotechnology careers can include scientists, research associates, technicians, public relations, accounting, computer services, marketing, and so on. Below, you will find a list of sample biotechnology careers and a brief description of each career. You will be selecting one career (you may select one that is not listed so long as you obtain teacher approval) and researching it so that you can successfully complete your assignment. The rubric for this assignment is attached to this document.

**Requirements for Career Listing**

* Title of profession
* Job duties (what would be required of this person on a daily basis?)
* Education requirements (high school diploma, bachelors, masters, doctorate)
* Training necessary for career
* Salary range (starting salary and potential salary)
* At least two images are included with detailed captions. Examples of appropriate images include: a professional working in the career, equipment used by the professional, a flowchart detailing the responsibilities of the professional, etc.
* Name of one company that hires for this profession (provide location of company as well)
* Citations in MLA formatting for at least three web pages used (see examples below). You can use easybib.com to help format your citation. These web pages must be legitimate scientific sources (not Wikipedia).
* Format: A wiki page within Ms. Ottolini’s class wiki page… http://www.msottolinibiology.wikispaces.com

You will be given a username and password to login to the page and create your own listing. Specific directions for how to use this technology will be given in class.

**Sample Biotechnology Careers with Descriptions:**

* Quality Control Analyst: runs tests, collects data, and analyzes data on raw materials for compliance with specifications
* Crime Lab Technician: use knowledge of science to assist law enforcement regarding cases
* Medical Scientist: investigates biological systems via clinical trials in order to treat human disease
* Biological Technician: set up and maintain labs, prepare samples, collect and compile data
* Biochemist: study proteins, RNA, DNA, and drugs in order to understand biological systems
* Microbiologist: focus on classification and functions of microbes
* Epidemiologist: try and understand diseases and public health issues
* Animal Technician: work with, maintain records, and perform medical procedures on animals
* Sales Representative: sell products manufactured by biotech companies

Other careers include patent lawyer, quality assurance employee, bio-processing engineer, bio-statistician, regulatory affairs employee, clinical affairs employee, biomedical engineer, intellectual property officer, forensic pathologist, and forensic psychiatrist.

**Helpful Web Pages:**

* <http://www.bio-link.org/home/sites/files/careersinbiotech20088e-j.pdf>
* <http://www.biotechnologydegrees.org/page/biotechnology-careers>
* <https://www.massbioed.org/writable/files/CareerInformation/biotech_job_descriptions_salary_ranges.pdf> and <https://www.massbioed.org/students/careers_in_biotech/biotech_career_listing>

**Biotechnology Career Profile Rubric**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Category** | **You Got It!** | **You’re Almost There!** | **You Need to Make Some Changes!** | **Your Score** |
| **Content** | Every item required in the list above is included with detail. Job duties are descriptive and describe the daily activities of the employee. Education and training requirements are specific and detailed.  10 points | Most of the required items are included. The job duties are listed but not described in detail. Education and training required are discussed but lack specificity or detail.  5 points | Few of the required items are included. The job duties listed are very basic and therefore do not accurately convey the full scope of the job responsibilities. Education and training required are either not discussed or are inaccurate and lack significant detail.  1 point | /10 |
| **Format** | The format of the Wiki page is logical and organized. All information is communicated clearly to the reader.  5 points | The format of the Wiki page is slightly disorganized and has inconsistent formatting. Most information is communicated clearly to the reader.  3 points | The format of the Wiki page is very disorganized. Only some of the information is communicated clearly to the reader.  1 point | /5 |
| **Images** | Two images are provided with detailed captions that clearly explain how the image relates to the chosen career.  5 points | Only one image is provided, or both images lack clear, detailed captions.  3 points | Images are not provided.  1 point | /5 |
| **Sources** | At least 3 legitimate scientific sources are included using MLA formatting.  5 points | 3 different sources are provided but some lack legitimacy or they are not properly cited using MLA formatting.  3 points | Sources are not included.  1 point | /5 |

**Total: \_\_\_\_\_ / 25 = \_\_\_\_\_**